

Genetic evaluation of the HSP70 protein in the Japanese quail (*Coturnix japonica*)

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Genet. Mol. Res. 7 (1): 133-139 (2008)

Received August 11, 2007

Accepted January 5, 2008

Published February 12, 2008

ABSTRACT. Heat stress is one of the main problems in modern aviculture, since it affects birds especially in the final phase of rearing, causing bird mortality and economic losses to the aviculturist. The quail, as most birds, has difficulties in dissipating heat. However, little is known about the mechanism that controls the responses of the organism to stressor agents. Therefore, the study of heat shock proteins (HSPs) in these birds is important. A 960-bp portion of HSP70 was amplified using oligonucleotide primers specific for chickens. The fragment was sequenced, since it was the same protein, although some modifications have been observed. It showed 98% homology with HSP70 stress protein in *Gallus gallus* and 99% homology with *Numida meleageris*.

Key words: HSP70; *Coturnix japonica*; Sequencing